ABSTRACT

An AC ripple current reduction circuit for an AC converter having: an AC voltage source at the input; a first capacitor across which the circuit output voltage is provided; a first, main inductor in series with the first capacitor and the input; an auxiliary circuit including a second capacitor and a transformer coupled to the main inductor, the secondary of the transformer being in series with the second capacitor; and a means for enabling the flow of a time varying voltage across the first and second capacitors that has a frequency much less than the ripple frequency of the current in the main inductor.